## FOR MORE INFORMATION

regarding the use of the D&D Technical Assistance Team for your D&D or other cleanup projects and activities, please contact:

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References with information on customer experience and satisfaction with this technical assistance initiative will be provided upon request.

#### TEAM ASSISTANCE AND THE PUREX EXPERIENCE

Lessons learned from the PUREX Deactivation Project:

- improved worker safety;
- improved hazard evaluation for proposed work activities;
- decreased project costs resulting from improved worker safety and safety documentation development;
- improved employee morale;
- better quality Unreviewed Safety Question (USQ) determinations.

From DOE/EH-0486 Report, *Integrating Safety* and Health During Deactivation With Lessons Learned From PUREX.

# D&D

#### Technical Assistance





U.S. Department of Energy Assistant Secretary for Environment, Safety and Health Office of Worker Health & Safety Office of Field Support, EH-53

## DOE'S D&D MISSION CHALLENGE



A result of the Department of Energy's (DOE) shift away from nuclear weapons production has been a rapid increase in the

number of its surplus facilities. Many of these facilities are decades old and have not only physically degraded, but also remain contaminated with radioactive and chemical materials. Because these conditions pose significant safety and health (S&H) risks to workers and the public, a large portion of the overall DOE mission has been dedicated to the dispositioning of these aged facilities through various cleanup, environmental restoration and deactivation and decommissioning or "D&D" projects and activities.

In executing its new mission, the Department has had to establish some challenging D&D goals: integrating worker and facility safety through a sound regulatory basis; developing an Integrated S&H Management Framework to guide D&D and other cleanup activities; and identifying realistic performance measures to gage project successes and failures. And because of severe budget restrictions, attaining these goals must all be done practically and cost-effectively.

In addition, resource problems and S&H risks are further exacerbated by an operations-oriented and fragmented regulatory framework that currently governs the conduct of cleanup activities. Also, because large scale D&D work is relatively new, the Complex has not yet established D&D S&H performance expectations for contract development and safety reviews.

# THE NEED FOR TECHNICAL ASSISTANCE

In response to these constraints and challenges, the DOE EH Office of Field Support has assembled a team of S&H experts who together form the DOE D&D Technical Assistance Team. The Team's essential charge is to help implement the Integrated S&H Management Framework for the new DOE mission. Its primary focus is the integration of occupational safety and health, chemical safety, environmental protection, nuclear safety and radiation protection activities into D&D project work planning, execution and performance monitoring. Team members are also prepared to help foster partnerships and communication among all interested organizations within the DOE Complex, including Environmental Restoration (EM), to address the chronic and systemic problems that hinder D&D safety management:

- ill-defined, and often redundant or conflicting D&D S&H requirements and expectations
- a fragmented S&H management system

INEFFECTIVE PROJECT AND WORK PLANNING AND EXECUTION



INADEQUATE S&H PERFORMANCE HIGH COST OF DOING BUSINESS

# PARTNERSHIPS DELIVER SERVICES

Armed with basic safety principles that include the use of a graded hazard analysis approach, early S&H involvement, teaming and worker involvement, the D&D Technical Assistance Team has the unique skills mix necessary to reduce risk and cost and improve hazards identification and control during cleanup work. Team involvement will enable partnerships to develop site-specific technical assistance plans that are tailored to most any D&D program by supporting customer needs for:

- √ the identification and clarification of S&H requirements for D&D work;
- √ the integration of worker and facility safety in developing a comprehensive facility Authorization Basis:
- $\sqrt{}$  the development of graded hazard assessment processes;
- √ the integration of S&H into D&D project planning, engineering, work execution and performance monitoring;
- √ the development of project Health and Safety Plans and other documentation for integration with facility safety analysis processes;
- √ the facilitation of S&H communication across the Complex;
- $\sqrt{\ }$  the conduct of plant or facility hazard surveys and walk-throughs; and
- $\sqrt{}$  explosives safety support for demolition projects.